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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/528,512 | 03/18/2005 | Victor Marten | SEMT.P-027-USNP | 4363 |
| 57380 | 7590 | 08/14/2007 | | |
| Oppedahl Patent Law Firm LLC P.O. BOX 4850 FRISCO, CO 80443-4850 | | | EXAMINER LAO, LUN YI | |
| | | | ART UNIT 2629 | PAPER NUMBER |
| | | | NOTIFICATION DATE 08/14/2007 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket-oppedahl@oppedahl.com

Office Action Summary

Application No.

10/528,512

Applicant(s)

MARTEN, VICTOR

Examiner

LUN-YI LAO

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims, “an isolator/dielectric layer between the second and third layers” in claim 9 and fails to disclose the recitation of “an isolator/dielectric layer between the third and fourth layer in claim 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 4-7 and 9-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification fails to disclose the limitation of "the second layer laying between the first and third layers and the third layer comprising a ground plane" as cited in claim 4. The specification only disclose a first layer(see figures 1-2) and a second layer having a ground plane(30)(see figures 3-4; paragraphs 13-14 and 24-25).

The specification fails to disclose the limitation of "the third layer lying between the second and fourth layers" as cited in claim 5. The specification fail to point out which layer is a third layer(see figure 5 and paragraph 26).

The specification fails to disclose the limitations of "an isolator/dielectric layer between the first and second layers" as cited in claim 8, fails to disclose the recitation of

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“an isolator/dielectric layer between the second and third layers” in claim 9 and fails to disclose the recitation of “an isolator/dielectric layer between the third and fourth layer in claim 10. The specification only disclose an non-conductive cover that provides galvanic isolation between the user's hand and the sensor(see paragraph 23), a first layer(see figures 1-2 and paragraph 11-12) and an isolator dielectric layer(55), However, the specification fail to disclose a third layer and a fourth layer. Even though the specification disclose the isolator dielectric layer(55) between layer 52 and 53, the layer(52) does not specify the layer(52) is second layer and the specification fails to point out which layer is a third layer or a fourth layer.

The specification fails to disclose the number of rows is at least ten and the number of columns is at least ten as cited in claim 12.

Claim Objections

4. Claims 1-7 and 9-11 are objected to because of the following informalities:

The recitation of “first layer” should be changed to – a cover layer – and second layer should be changed to – first layer – (see figures 1-2 and paragraphs 11-12 and 23) in claims 1 and 4.

The recitation of “the second layer further comprises annular copper around the electrodes” in claim 6 should be changed to -- the first layer further comprises annular copper around the electrodes – (see figures 1-2; paragraphs 11-12 and 24).

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graham(4,475,235) in view Owens(5,953,199).

Graham teaches a capacitive touch pad comprising a second layer(see figure 10). Graham teaches the second layer comprising a plurality of row-shaped row-sensing electrodes(258, 262) and a row-by-column array of column-sensing electrodes(see figure 10), each column of column-sensing electrodes(260) interconnected by conductive traces; the row-sensing electrodes(258, 262) defining interleaved combs therebetween, each comb having at least two fingers(see figure 10 and column 8, lines 5-48).

Graham fails to disclose a non-conductive cover.

Owens teaches a touch pad comprising non-conductive cover(1)(see figures 1-2; column 3, lines 8-19 and lines 66-68; and column 4, lines 1-2). It would have been obvious to have modified Graham with the teaching of Owens, so as to a touch pad can be protected from static charge from a user(see column 3, lines 8-15).

As to claims 2 and 3, it would have been obvious to have fingers or the distance between fingers are no wider than eight mils since Graham has disclosed the length of

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the fingers would be changed and the less length of fingers would provide better result of detection.

As to claims 11, Graham teaches the number of rows is at least three and the number of columns is at least three.

As to claims 12, It would have been obvious to ten number of rows and ten number of columns since it is obvious design choice since it would depend on a designers the number of rows and columns they would like to have in the touch panel and the more number of rows and columns, the detecting position more accurate.

7. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP Patent No. 61-163525 in view Owens(5,953,199).

JP Patent No. 61-163525 teaches a capacitive touch pad comprising a second layer(see figures 1-5 and 7). JP Patent No. (61-163525) teaches the second layer comprising a plurality of row-shaped row-sensing electrodes(4) and a row-by-column array of column-sensing electrodes(see figures 1-5, 7), each column of column-sensing electrodes(3) interconnected by conductive traces; the row-sensing electrodes(4) defining interleaved combs therebetween, each comb having at lest two fingers(see figures 1-5, 7 and abstract).

JP Patent No.(61-163525) fails to disclose a non-conductive cover.

Owens teaches a touch pad comprising non-conductive cover(1)(see figures 1-2; column 3, lines 8-19 and lines 66-68; and column 4, lines 1-2). It would have been obvious to have modified JP Patent No. with the teaching of Owens, so as to a touch pad can be protected from static charge from a user(see column 3, lines 8-15).

As to claims 2 and 3, it would have been obvious to have fingers or the distance between fingers are no wider than eight mils since Graham has disclosed the length of the fingers would be changed and the less length of fingers would provide better result of detection.

As to claims 11, JP Patent teaches the number of rows is at least three and the number of columns is at least three(see figures 1-3).

As to claims 12, It would have been obvious to ten number of rows and ten number of columns since it is obvious design choice since it would depend on a designers the number of rows and columns they would like to have in the touch panel and the more number of rows and columns, the detecting position more accurate.

Response to Arguments

8. Applicant's arguments filed on June 28, 2007 have been fully considered but they are not persuasive.

Applicant argues that Graham does not teach row-sensing electrodes. The examiner disagrees with that since applicant does not define the function of the row-sensing electrodes in the claims and Graham's row electrodes(258, 262) can be considered as row-sensing electrodes(see figure 10; column 8, lines 23-46 and paragraph #6 above).

Applicant argues that Graham does not teach column-sensing electrodes and lines (258, 262) is not electrodes at all. The examiner disagrees with that does not

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define the function of the row-sensing electrodes in the claims and Graham's row electrodes(258, 262) can be considered as row-sensing electrodes and lines (258, 262) is electrode lines since the bottom plate(252) is conductive plate(252)(see figures 10-11; column 8, lines 23-68; column 9, lines 1-2 and paragraph #6 above).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pallas(US 2004-0175257) teaches a comb sensor.

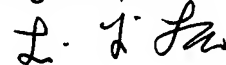
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lun-yi Lao whose telephone number is 571-272-7671. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306, after July 15, 2005, the fax number is 571-273-8300,

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 7, 2007



Lun-yi Lao
Primary Examiner